

Vitamin A and Health Surveys in the Federated States of Micronesia

Public Health Problem

Vitamin A deficiency (VAD) is associated with poor response to childhood vaccinations and with increased mortality and morbidity among children and pregnant women. VAD has been recognized as a problem among children in parts of the Federated States of Micronesia (FSM) since the 1980s.

CDC Laboratory Response



- In 1991, CDC measured serum vitamin A in two groups of preschool children and a group of mothers in Chuuk state who participated in a CDC hepatitis B vaccine study. VAD was found in 55% of children aged 24-36 months, in 76% of children aged 3-6 years, and in 30% of mothers.
- In 1993, CDC and a Public Health Service medical officer in FSM conducted a vitamin A and lead survey of a convenience sample of preschool children in Pohnpei state. This survey found VAD in 57% of the children.
- In January and February 2000, a CDC team, in collaboration with UNICEF and the FSM Department of Health and Social Services, conducted a micronutrient and health survey of children aged 24-59 months and their mothers in Kosrae and Yap states. This survey found VAD in 58% of children and 58% of mothers in Kosrae and in 38% of children and 12% of mothers in Yap.

Public Health Impact

- Results of the 1991 Chuuk study indicated the need to restructure that state's vitamin A capsule-distribution program.
- The subsequent survey in Pohnpei eventually resulted in implementation of a program to

distribute vitamin A capsules in that state.

- The most recent surveys in Yap and Kosrae confirmed that a severe VAD problem exists in those states. This data will provide baseline descriptions of the vitamin A status of preschool children and women of childbearing age against which the effectiveness of the capsule-distribution program in treating VAD will be assessed.

Future Plans

- During 2001, CDC, in collaboration with the FSM Department of Health and Social Services, will conduct a population-based micronutrient, lead, diet, and health survey of preschool children and mothers in Chuuk state.
- CDC has also proposed a micronutrient survey of either Pohnpei state in the FSM or of another country in the Pacific islands in 2002.

Questions or Comments

<http://www2.cdc.gov/nceh/contactnceh/frmSubmit.asp>

The Centers for Disease Control and Prevention (CDC) protects people's health and safety by preventing and controlling diseases and injuries; enhances health decisions by providing credible information on critical health issues; and promotes healthy living through strong partnerships with local, national, and international organizations.

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